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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/775,429

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Siddhartha Chaudhuri

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DALY, CROWLEY & MOFFORD, LLP

SUITE 101

275 TURNPIKE STREET

CANTON, MA 02021-2310

EXAMINER

STAHL, MICHAEL J

ART UNIT

PAPER NUMBER

2874

DATE MAILED: 10/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/775,429

Applicant(s)

CHAUDHURI ET AL.

Examiner

Mike Stahl

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 11-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☒ Claim(s) 2 and 3 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 March 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4-6. 6) ☐ Other: .

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Election/Restrictions

Applicant's election without traverse of Group I (claims 1-10) in Paper No. 8 is acknowledged.

Drawings

Figs. 2-4 are objected to because "sysytem" should be "system" in element 136.

Claim Objections

Claim 2 is objected to because it uses "the first multiplexing switch" and "the first multiplexing device" to refer to the same element. Claim 3 similarly uses "second demultiplexing device" and "second demultiplexing switch" to refer to the same element. Applicant should choose either "device" or "switch" in these instances to avoid confusion. If applicant changes multiplexing or demultiplexing "device" to "switch" in claims 2 and 3, the same changes should be applied to claim 1.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 5 currently depends from claim 1 but refers to the first and second switch fabrics which are not mentioned until claim 4. Thus it appears that claim 5 should depend from

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claim 4, and this dependency will be assumed for purposes of comparison with prior art in this office action. Claims 6-7 are rejected since they depend from rejected claim 5.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 9, and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Schroeder et al. (US 6198856).

Schroeder discloses an optical switch device (see fig. 2A) including: a switch fabric 11; a plurality of input ports 14, 16, 18, 22 for admitting incoming data to the switch fabric; a plurality of output ports 24, 26, 28, 32 for passing data from the switch fabric; a first demultiplexing device 50 (“test column”) coupled to the input ports; a signal generator 56 coupled to the first demultiplexing device 50 for injecting data into the switch fabric; a first multiplexing device 60 (“test row”) coupled to the output ports; and a first signal analyzer 57 coupled to the first multiplexing device 60 for analyzing the injected data. Thus the switch device taught by Schroeder meets the limitations of claim 1. The method of using the Schroeder device also

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satisfies claims 9 and 10. It is noted that the multiplexing device **60** is a multiplexing switch (col. 7 line 66 – col. 8 line 5).

As to claim 3, Schroeder teaches that the overall switch arrangement **70** may be cascaded (col. 8 lines 21-31). In this case there would be both a second demultiplexing switch **50** and a second signal analyzer **57**, associated with a downstream arrangement **70**, the second switch and analyzer being coupled to the input ports of the upstream switch.

Claims 1 and 4-9 are rejected under 35 U.S.C. 102(a) as being anticipated by Gerstel et al. (US 5867289).

Gerstel discloses an optical switch device (see fig. 2) including: a switch fabric (including a number of individual switch fabrics **204** corresponding to each wavelength) a plurality of input ports through which incoming data passes to the switch fabric; a plurality of output ports through which outgoing data passes from the switch fabric; a first demultiplexing device **203** coupled to the input ports of the switch fabric; a signal generator **202** coupled to the first demultiplexing device **203** for injecting data into the switch fabric; a first multiplexing device **205** coupled to the output ports of the switch fabric; and a first signal analyzer **210/220** for analyzing the injected data. Thus the Gerstel switch as just described satisfies claims 1 and 4, and the method of using it satisfies claim 9.

As to claim 5, the demultiplexers **203** act as splitters to split an incoming signal to at least first and second signals of different wavelengths, the first and second signals being received by respective switch fabrics **204** with corresponding wavelengths. As to claim 6, each output port can receive signals from the first and second fabrics **204** by way of multiplexers **205**. As to claim 7, the signal analyzer **210/220** analyzes data from the first and second switch fabrics.

As to claim 8, an add/drop multiplexer comprising drop ports **207** and add ports **208** is connected to the switch fabric.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schroeder et al. (cited above).

As to claim 2, Schroeder does not disclose a multiplexer coupled between the first multiplexing switch **50** and the first signal analyzer, with a second signal analyzer also being coupled to the multiplexer. However, it would have been obvious to a person having ordinary skill in the art to provide a multiplexer and a second signal analyzer for backup purposes, or alternatively, for enabling the analysis of additional parameters which are not covered by the first signal analyzer.

As to claim 8, Schroeder does not mention an add/drop multiplexer coupled to the switch fabric, but does suggest that the switch is intended to be used in a typical wavelength division multiplexed system (col. 1 lines 28-35). Add/drop multiplexers are already well known in the art. It would have been obvious to a skilled person to couple an add/drop multiplexer to the Schroeder switch in order to enable customary adding or dropping of wavelength channels from the network of which the switch is a part.

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This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Conclusion

The additional references cited on the attached PTO-892 form are considered pertinent to applicant's disclosure.

Any inquiry concerning this communication should be directed to Mike Stahl at (703) 305-1520. Official communications eligible for submission by facsimile may be faxed to (703) 872-9318 (before final) or (703) 872-9319 (after final). Inquiries of a general or clerical nature (e.g., a request for a missing form or paper, etc.) should be directed to the Technology Center 2800 receptionist at (703) 308-0956 or to the technical support staff supervisor at (703) 308-3072.

MJS

Michael J. Stahl
Patent Examiner
Art Unit 2874


AKM ENAYET ULLAH
PRIMARY EXAMINER

September 18, 2003